

Scale Model Acoustic Test Overview

Launch environments, such as liftoff acoustic (LOA) and ignition overpressure (IOP), are important design factors for any vehicle and are dependent upon the design of both the vehicle and the ground systems. LOA environments are used directly in the development of vehicle vibro-acoustic environments and IOP is used in the loads assessment.

The Scale Model Acoustic Test (SMAT) program was implemented to verify the Space Launch Systems LOA and IOP environments for the vehicle and ground systems including the Mobile Launcher (ML) and tower. The SMAT is currently in the design and fabrication phase. The SMAT program is described in this presentation.